Educational Psychology

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University of Texas at Dallas

SECOND EDITION

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EDUCATIONAL PSYCHOLOGY, SECOND EDITION

About the Author

John W. Santrock

John Santrock received his Ph.D. from the College of Education and Human Development at the University of Minnesota. He taught at the University of Charleston and the University of Georgia before joining the faculty at the University of Texas at Dallas. He has worked as a school psychologist and currently teaches educational psychology at both the undergraduate and graduate levels. John's grandmother taught all grades in a one-room school for many years and his father was superintendent of a large school district. John's research has included publications in the *Journal of Educational Psychology* that focus on the contextual aspects of affectively toned cognition and children's self-regulatory behavior as well as teachers' perceptions of children from divorced families. He has been a member of the editorial boards of *Child Development* and *Developmental Psychology*. His publications include these leading McGraw-Hill texts: *Child Developmeant (9th ed.), Adolescence (9th ed.), Life-Span Development (9th ed.),* and *Psychology (7th ed.).*
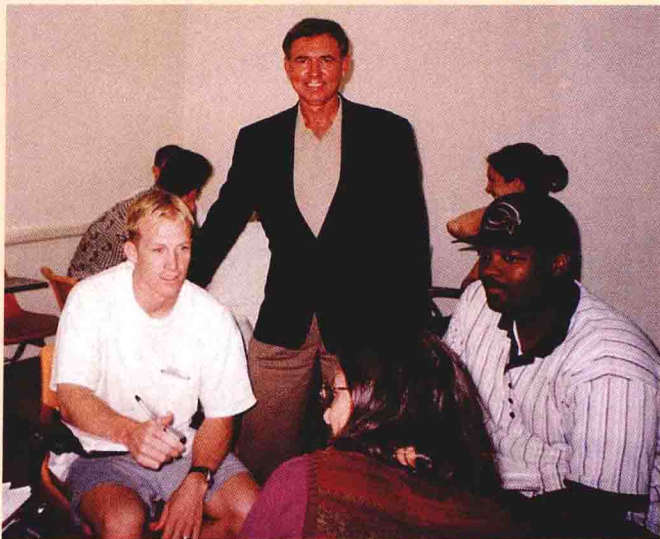
John Santrock, teaching in his undergraduate educational psychology class, in which he makes good use of small group discussion.

To Alan Venable:
   Once Again, For Caring So Much About
   This Book and Improving
   Children's Education

Preface

It is very gratifying that the first edition of *Educational Psychology* was so well received. This is reflected in the book being given McGraw-Hill's award as the best first edition of a textbook published in 2001, and the extremely positive comments of instructors and students.

What do instructors really want in an educational psychology textbook? In preparation for the second edition of the book, McGraw-Hill obtained extensive feedback from a large number of instructors about what their ideal educational psychology textbook would be like. In response to instructors' comments, much has stayed the same, and much has changed in the second edition.

What has stayed the same is *the commitment to present educational psychology as a critical foundation for becoming a competent teacher and to do so in an engaging way.* I want students to feel that when they have finished reading and studying this book that the information will help them become an outstanding teacher—one who can open minds to the excitement of learning.

My goal was to write a book that students say this about:

"I love this book!"

"I am using many of the ideas from my educational psychology text in my teaching and they are working great!"

"I teach in the inner city and my educational psychology text is a great resource for me. The focus on diversity and technology have been extremely useful. I am enriched by the book."

These comments come from Jennifer Holliman-McCarthy, Richard Harvell, and Greg Hill, who used the first edition of *Educational Psychology* and are now public school teachers. In addition, here are some very positive comments from instructors about the first edition of the text:

"I have only received very positive evaluations about [John Santrock's] text from students. Indeed, many students have told me that they keep the book after they have finished the course and continue to refer to it when they have become full-fledged teachers."

—LENA ERICKSEN *Western Washington University*

"This book seems more concrete, direct, and useful to preservice teachers than many of its competitors."

—DAVID DALTON *Kent State University*

"I wasn't prepared to like this text. In general, ed psych texts are all too predictable. While people claim to be innovative, in the end they are not. In contrast, John Santrock's text is a big WOW! His book is different. It is written for the prospective teacher and not the future educational psychologist."

—RANDY LENNON *University of Northern Colorado*

"Those who are not using Santrock have not seen it. Please communicate my sincere enjoyment of this quality text to John Santrock."

—ROBERT G. BROWN *Florida Atlantic University–Boca Raton*

"John Santrock has done an admirable job of writing an engaging text. His experience and reputation for writing quality material for students certainly shows in this book."

—CAROLYN EVERTSON *Vanderbilt University*

"I found John Santrock's text to be a very engaging and readable work with some wonderful pedagogical features that give it life. Obviously, this book was carefully conceived and developed."

—EVA ESSA *University of Nevada–Reno*

NEW IN THIS EDITION

Educational psychology instructors were virtually unanimous in telling me to expand the material on learning and cognition. Instructors said that they also want a book that is very up-to-date. Further, they very much liked the emphasis on pedagogy in the first edition but challenged me to make it even better.

"This book is fabulous."

—PATRICIA WILLEMS *Florida Atlantic University–Davie*

Two New Chapters on Learning and Cognition The first edition had 14 chapters; the second edition has 16. The two new chapters are on learning and cognition. In the first edition, the chapter on information-processing approaches was very long and included many topics. Instructors said that they wanted a separate chapter on basic cognitive processes, such as memory, and complex cognitive processes, such as problem solving and thinking. The second edition of the book splits the

information-processing chapter into two chapters and expands the discussion of cognitive processes: chapter 8 (The Information-Processing Approach) and chapter 9 (Complex Cognitive Processes).

Instructors also strongly urged me to expand the coverage of learning and cognition in the content areas and create a stand-alone chapter on this topic. Chapter 11 in the second edition is now devoted exclusively to this topic. Developing this separate chapter also allowed me to expand the coverage of social constructivist approaches and have a separate chapter (10) on this topic.

"I think the new organization provides a logical progression of topics with increasing emphasis given to cognition. I also like that cognition in content areas is a separate chapter."

—KIM LOOMIS *Kennesaw State University*

Contemporary Research Instructors told me that they wanted a book that is very up-to-date and includes the latest contemporary research. Here is what I did to make the book very contemporary:

More Than 600 Twenty-First-Century References The second edition of *Educational Psychology* has more than 600 citations from the twenty-first century with more than 300 of these from 2001 through 2003.

"The wealth of up-to-date theory and research for each topic is wonderful!"

—REAGAN CURTIS *Northwestern State University*

"This text is well researched and up-to-date in its use of research and theory."

—PATRICIA WILLEMS *Florida Atlantic University–Davie*

Expert Research Consultants No single author can possibly be an expert in all areas of educational psychology. This is especially true today with the substantial expansion of research in the field. In the first edition, a number of leading experts in educational psychology research served as consultants. This tradition was continued in the second edition with many new experts contributing valuable feedback about cutting-edge research and ideas in their area of expertise. The expert consultants for this book are literally a Who's Who in the field of educational psychology. They each gave me very detailed feedback about one to three chapters that focus on their areas of expertise or about a main theme in the book (such as diversity). The information provided by these expert research consultants for *Educational Psychology*, second edition, significantly improved the book's content:

James McMillan *Virginia Commonwealth University*

Chapters 1 (Educational Psychology: A Tool for Effective Teaching), 15 (Standardized Tests and Teaching), and 16 (Classroom Assessment)

Eva Essa *University of Nevada–Reno*

Early childhood education coverage throughout the book

Kenji Hakuta *Stanford University*

Chapters 2 (Cognitive and Language Development), 5 (Sociocultural Diversity), and 11 (Learning and Cognition in the Content Areas)

Nathan Brody *Wesleyan University*

Chapter 4 (Individual Variations)

Valerie Pang *San Diego State University*

Chapter 5 (Sociocultural Diversity) and diversity coverage throughout the book

Carlos Diaz *Florida Atlantic University*

Chapter 5 (Sociocultural Diversity) and diversity coverage throughout the book

Daniel Hallahan *University of Virginia*

Chapter 6 (Learners Who Are Exceptional)

Dale Schunk *University of North Carolina–Greensboro*

Chapters 7 (Behavioral and Social Cognitive Approaches) and 13 (Motivation, Teaching, and Learning)

Albert Bandura *Stanford University*

Chapters 7 (Behavioral and Social Cognitive Approaches) and 13 (Motivation, Teaching, and Learning)

Michael Pressley *University of Notre Dame*

Chapters 8 (The Information-Processing Approach) and 9 (Complex Cognitive Processes)

Robert Siegler *Carnegie Mellon University*

Chapters 8 (The Information-Processing Approach) and 9 (Complex Cognitive Processes)

Gary Bitter *Arizona State University*

Chapter 12 (Planning, Instruction, and Technology) and technology coverage throughout the book

Carolyn Evertson *Vanderbilt University*

Chapter 14 (Managing the Classroom)

The biographies and photographs of the expert research consultants appear later in the Preface.

"The text is of very high quality. It covers a lot of important material at an interesting and accessible level."

—ROBERT SIEGLER *Carnegie Mellon University*

Research Content With the input from the expert research consultants, as well as an extensive number of instructors who teach educational psychology and my own examination of the research literature, I carefully modified and updated the content of each chapter where appropriate. The result is

a number of improvements in content, which will be detailed shortly on a chapter-by-chapter basis.

> "I am very impressed with this text. I certainly would recommend it for adoption. It is thorough but not overwhelming. It is clearly written in a style that undergraduates will appreciate. Educational psychology is a course that many students have difficulty with and do not appreciate why they are enrolled in it. They often complain that there is too much material and that the content is not well linked to practice. The typical student—an undergraduate teacher education major—is most concerned about how the content can be applied to teaching. It is evident that John Santrock knows his audience well, and he is to be congratulated for crafting a text that should deflect these criticisms."
>
> —DALE SCHUNK *University of North Carolina–Greensboro*

Improved Text Pedagogy Now more than ever, students struggle to find the main ideas in their courses. To help them achieve the best possible outcome in educational psychology, I have created a new comprehensive Learning Goals system that is integrated throughout each chapter. New Teaching Strategies interludes, Self-Assessments, and Diversity and Education interludes have been added, and others fine-tuned. A new case study feature called Crack the Case has been written for each chapter, a new section called Portfolio Activities was created, and new chapter-ending Internet activities have been developed.

> "What distinguishes this text is the clarity of writing, the multiple pedagogical aspects found in each chapter, and the conscious effort to integrate theory and practice. This text is the quintessential effort to merge ideas with meaningful activities."
>
> —ROBERT RICE *Western Oregon University*

> "I loved the book (2nd edition)! The writing is clear and concise and the examples used are related to education."
>
> —DOT MILES *Saint Louis University*

> "What distinguishes this text is the very practical approach—all the examples and the Teaching Strategies interludes. As I read each chapter, I was aware that the focus was on learning about educational psychology to be able to be a good teacher. Theories were always discussed in terms of their practical applications in the classroom."
>
> —BARBARA POWELL *Eastern Illinois University*

The Learning Goals System Built around the main text headings and each chapter's learning goals, the new learning system featured in this second edition keeps the key ideas in front of the reader from the beginning to the end of the chapter. Each chapter has no more than six main headings and corresponding Learning Goals (most have three or four), which are presented side-by-side on the chapter-opening spread. At the end of each main section of the chapter, the learning goal is repeated in a new feature called Review and Reflect, which prompts students to review the key topics in

the section and poses bulleted questions to encourage them to think critically about what they have read. At the end of the chapter, under the heading, Reach Your Learning Goals, the learning goals guide students through the bulleted chapter review, which essentially answers the bulleted questions in each of the chapter's review sections.

> "The chapter Learning Goals/Reach Your Learning Goals is a terrific organizational tool for students."
>
> —LINDA VERONIE *Slippery Rock University*

> "Having a small number of learning goals for each chapter and then having each goal broken down in the Review and Reflect section made everything in the chapter tie together."
>
> —BARBARA POWELL *Eastern Illinois University*

Teaching Strategies Interludes A critical aspect of an educational psychology text is the extent to which it provides excellent and practical strategies that students can use when they become teachers. Teaching Strategies appear a number of times in each chapter. The format of this feature has been changed to better integrate it with the text material. This feature has been noted to be one of the text's key strengths.

> "The Teaching Strategies are remarkable and I think students will love them. Many instructors have a hard time translating theory and/or research into practice. John Santrock has done an excellent job and should be a model to other authors."
>
> —RANDY LENNON *University of Northern Colorado*

> "John Santrock does an extraordinary job of making the material meaningful to students through numerous, and well-developed, teaching strategies. He goes beyond the obvious by providing teaching strategies that generalize and appropriately transfer."
>
> —CAROLINE GOULD *Eastern Michigan University*

Diversity and Education Diversity continues to be an important theme in the second edition. An entire chapter (5) is devoted to sociocultural diversity and each chapter has a Diversity and Education interlude that is integrated with the text material, following immediately after material relevant to the diversity topic is presented. A number of the Diversity and Education interludes are new in this edition.

> "You never feel like the diversity material is a politically correct 'add on' but rather the reflection of a personal philosophy and vision."
>
> —CONNIE MOSS *Duquesne University*

> "I think the coverage of diversity and multicultural issues in this text compared to others is outstanding."
>
> —JULIA MATUGA *Bowling Green State University*

"I found issues of culture, ethnicity, and gender to be appropriately and naturally integrated into other chapters and not simply segregated in chapter 5 on sociocultural diversity."

—CARLOS DIAZ *Florida Atlantic University–Boca Raton*

"I find these particularly unique! They could be great class activities to really add meaning to course material. In some instances, they could be developed into alternative types of assessment for an instructor wishing to balance out assessment techniques."

—ALYSSA GONZALEZ *Florida Atlantic University–Jupiter*

Self-Assessment The Self-Assessment feature in the first edition was positively received by instructors and students. The Self-Assessments encourage students to examine their characteristics and skills related to the content of a chapter. New Self-Assessments have been added in the second edition, others have been deleted, and yet others have been fine-tuned. In addition, students can now fill these out online on the text's website and e-mail their responses to their instructors.

"The Self-Assessments are a great idea. I was tempted to complete some of them myself. Students will enjoy completing these."

—GABY VAN DER GIESSEN *Fairmont State College*

Technology and Education Each chapter has one Technology and Education box related to the content of the chapter. A number of new Technology and Education boxes were created for the second edition of the book.

"The coverage of technology is better than any text I've seen."

—WALTER HAPKIEWICZ *Michigan State University*

Case Studies A new, full-page case study, feature entitled Crack the Case, was written for each chapter by Dr. Nancy DeFrates-Densch of Northern Illinois University. These high-interest case studies appear at the end of each chapter and are closely tied to the content in the chapter. Critical thinking questions follow each case study.

"An excellent feature! Each of the case studies is a well-written, 'real-world' example of a realistic education situation."

—LYNNE HAMMANN *University of Akron*

"The Crack the Case feature is a great addition to the text. I would utilize these."

—BARBARA RADIGAN *Community College of Allegheny County*

Portfolio Activities At the end of each chapter, four Portfolio Activities related to the chapter content are presented. They are organized into three categories for instructors' ease of use: Independent Reflection, Collaborative Work, and Research/Field Experience. In addition, downloadable portfolio templates are available on the text's website so that students can include these activities in their final teaching portfolios. Each Portfolio Activity is also coded to a specific INTASC standard.

Taking It to the Net An extensive effort was made to create Internet activities that will provide a meaningful learning experience for students. The Taking It to the Net exercises authored by Veronica Rowland of University of California at Irvine, appear at the end of each chapter. Answers are coordinated with the book's website.

"I think these activities are great! They allow students to become involved with technology and to use outside resources to help them understand subject matter. I use them in my classes and have received excellent feedback from students on them."

—PATRICIA WILLEMS *Florida Atlantic University–Davie*

Student Toolbox At the end of each chapter, the Student Toolbox feature reminds students of the rich learning tools that can be found on the accompanying Student Toolbox CD (shrinkwrapped with every book), and the book's website (**www.mhhe.com/santedu2e**). These tools will allow students to master each chapter's content.

Chapter-by-Chapter Changes Here are the highlights of the changes in each chapter of *Educational Psychology*, second edition:

CHAPTER 1:
Educational Psychology: A Tool for Effective Teaching

- More streamlined presentation in the first part of the chapter with deletion of the section on the complex, fast-paced nature of teaching and the section on good and bad teachers at the request of instructors. Some of this material was moved later in the chapter under effective teaching.
- New section on diversity and early educational psychology
- New section on further historical developments that focuses on Skinner's behaviorism in the mid-twentieth century and the cognitive revolution that took hold by the 1980s
- New introduction to diversity section, highlighting characteristics of the new immigrant population of children in the United States (Suarez-Orozco, 2002)
- New Diversity and Education interlude: "The Cultural School" (Pang, 2001)

- Updated National Educational Technology Standards (2001)
- Deleted section on professional growth at the request of instructors
- Reorganization of research methods section into new subsections: descriptive, correlational, and experimental
- New section on ethnographic studies
- Moved discussion of participant methods to descriptive methods
- New examples of naturalistic observation research, including new figure (1.3) (Crowley & others, 2001; Tennenbaum & others, 2002)
- New figure (1.5) comparing correlational and experimental research methods

"The changes made to the research section are wonderful. This introduction to research gives them the overall big picture on research methods that will help them in interpreting educational research. . . . As far as introductory chapters go, this is one of the better ones."

—**ALYSSA GONZALEZ** *Florida Atlantic University–Jupiter*

CHAPTER 2:
Cognitive and Language Development

- All of the material on reading was deleted from this chapter and moved to new chapter 11, Learning and Cognition in the Content Areas, at the request of reviewers
- Also at the request of reviewers, the discussion of physical development was deleted from the chapter to allow for a more focused examination of cognitive and language development
- The introductory material on the nature of development was shortened and the coverage of the nature and nurture issue moved to the discussion of intelligence in chapter 4, Individual Variations
- New chapter-opening teaching story on Donene Polson that is linked to Vygotsky's cognitive sociocultural approach
- Important new, very contemporary section on the brain, focusing on cells and regions, lateralization, and the brain and children's education
- Expanded teaching strategies section in the coverage of Vygotsky
- New Technology and Education box, "Technology and Children's Vocabulary Development," focusing on computers, audiobooks, and educational television
- New Self-Assessment, "Applying Piaget and Vygotsky Theories in My Classroom"
- New discussion of concepts of organization and equilibration in the Piaget section

"Theory is translated into practice well. I have used a number of books for my course and John Santrock's seems to have better examples, and they are presented in a useable fashion."

—**DOUGLAS BEED** *University of Montana–Missoula*

CHAPTER 3:
Social Contexts and Socioemotional Development

- New chapter-opening teaching story on Mr. Z and how he ties service learning to a unit on ecosystems in his fourth grade class
- New Diversity and Education interlude: "Are America's Schools Leaving Latinas Behind?"
- Updated coverage of Joyce Epstein's (2001; Epstein & Sanders, 2002; Epstein & others, 2002) views on school-family linkages, including new examples of effective programs
- Coverage of recent national survey (2000) on cheating in schools
- Included recent research (2001) on peer relations and problems
- New discussion of strategies for helping children from divorced families
- New section on high schools, including their problems and a number of recommendations for improving U.S. high schools (2001)
- Deleted the section on emotional intelligence and moved it to chapter 4, Individual Variations, at the request of reviewers
- Deleted the section on adolescent problems to give the chapter a more manageable size and a smaller number of topics
- New discussion of high school dropouts, including trends from the 1940s through 2000, and new figure (3.5) (National Center for Education Statistics, 2001)
- New discussion of very recent data on developmental changes in self-esteem, especially for girls, and new figure (3.6) (Robins & others, in press)
- New Self-Assessment: "Where Are You Now? Exploring Your Identity"
- Added examples of each type of identity status at the request of reviewers

"The amazing journey from social context to self to moral development and then the return to social context is a work of art. When I read the preview sections, I thought 'How can he ever link these very different areas?' But he did and very cogently."

—**JEAN NEWMAN CLARK** *University of South Alabama*

CHAPTER 4:
Individual Variations

- New chapter-opening teaching story on Shiffy Landa, who uses the multiple-intelligences approach in her first-grade classroom
- New section added, "Do People Have a General Intelligence?" based on expert Nathan Brody's recommendation
- New Technology and Education box: "Technology and Multiple Intelligences"
- New coverage of links between intelligence and schooling
- Deleted the section on creativity and moved it to new chapter 9, Complex Cognitive Processes, at the request of reviewers
- Added Gardner's view of misuses of his multiple-intelligences concept
- Deleted section on systems of learning and thinking styles at the request of reviewers
- Added recent research on genes and intelligence
- Modified definition of intelligence
- Discussion of emotional intelligence now covered in this chapter in the multiple-intelligences section
- Added research on environmental influences in link between ethnicity and intelligence
- New section on evaluating learning and thinking styles

- Expanded teaching strategies for working with children from low-income backgrounds
- Added Joseph LeDoux's (2002) ideas on the emotional brain in females and males
- Extensively revised and updated discussion of gender bias and classrooms with new coverage of the situations in which gender bias occurs against males and the situations in which it occurs against females
- New section on gender differences in school attainment
- Revised, expanded, updated description of gender similarities and differences in math, science, reading, and writing
- Inclusion of recent study showing link between poverty and lower math and reading achievement scores in 12- to 14-year-olds (Eamon, 2002)
- New figure (5.1) comparing children's vocabulary development in welfare and professional homes and the language input children experience in these contexts
- New figure (5.2) on grammar proficiency and age at arrival in the United States
- New discussion of recent research on the gender difference in relational aggression (Crick & others, 2001; Underwood, 2002)
- Added recent data from the National Assessment of Educational Progress (2001) on gender and reading achievement and gender and science achievement, including two new figures (5.3 and 5.4) illustrating these gender differences

CHAPTER 5:
Sociocultural Diversity

- Addition of Kenji Hakuta's (2000) recent research on how long it takes language-minority students to learn English
- New section on culturally relevant teaching
- New section on issues-centered education
- New discussion of strengths and courage of children and their families living in impoverished conditions

CHAPTER 6:
Learners Who Are Exceptional

- Reorganization of chapter with Children Who Are Gifted now a main heading and the last section in the chapter
- New Diversity and Education interlude on the disproportionate representation of minority students in special education

- New Through the Eyes of Teachers insert: "Discovery Centers"
- Updating of special education statistics for the twenty-first century
- New discussion of discrepancy issue in identification of learning disabilities
- Added recent major study (MTA) on treating ADHD (Swanson & others, 2001)
- Added comments about the cochlear implant controversy
- Updated coverage of issues involved in defining learning disabilities
- Added comments about structure and teacher-direction in working with children with ADHD
- New coverage of positive behavioral support and functional behavioral assessment, recommended by expert consultant Daniel Hallahan
- Description of recent study showing how inclusion benefits students with a learning disability (Rea, McLaughlin, & Walther-Thomas, 2002)

"I think this chapter is very well done. It is thorough but concise. It provides just the right amount of depth on this topic for an ed psych text."

—DANIEL HALLAHAN *University of Virginia*

"This is a great chapter that is very well organized. . . . It did not surprise me when I learned that John Santrock was a former school psychologist. His expertise in this area was evident."

—KATHY BROWN *University of Central Oklahoma*

CHAPTER 7:
Behavioral and Social Cognitive Approaches

- Revised definition of learning, as recommended by expert consultant Albert Bandura
- Revised, updated coverage of observational learning based on Bandura's recommendations
- Added comments about social cognitive theory evolving out of behavioral theories but strongly emphasizing cognition
- Added criticisms of the behavioral theories based on expert consultant Dale Schunk's recommendations
- Improved figure (7.2) on how classical conditioning works
- New discussion and figure (7.6) on cross-cultural attitudes toward corporal punishment (Curran & others, 2001)
- Description of recent study showing that the use of spanking by parents to discipline children is linked to an increase in problem behavior over time (McLoyd & Smith, 2002)

"The major theories and principles are covered well. The explanation of forms of reinforcement and punishment is very well done. . . . I am especially glad to see self-regulation included. . . . This chapter includes many applications and they accurately reflect the principles. The chapter achieves a successful balance between theory and applications."

—DALE SCHUNK *University of North Carolina–Greensboro*

CHAPTER 8:
The Information-Processing Approach

- Extensively reorganized chapter with material on thinking, problem solving, and transfer moved to new chapter 9, resulting in a much more focused chapter on the information-processing approach
- Completely new section on expertise, including discussions of expertise and learning, acquiring expertise, and expertise and teaching
- New high-interest introduction to encoding and attention, including new figure (8.3) on the faces of famous individuals to illustrate the importance of attention
- New Technology and Education box: "Experts and Technology"
- New Diversity and Education interlude: "Culture, Gender, and Memory"
- Reorganized and updated coverage of working memory
- New discussion of recent research on the influence of expressive writing on working memory and its application to anxiety about math (Gray, 2001; Klein & Boals, 2001)
- Expanded and improved Self-Assessment: "How Effective Are My Memory and Study Strategies?"
- New discussion of developmental changes in the role of elaboration in memory, including new figure (8.3) of research data on this topic
- New discussion of developmental changes in the role of imagery in memory, including new figure (8.4) of data from a research study on this topic
- Expanded emphasis on the reconstructive nature of schema theory, including new figure (8.9) on the "War of the Ghosts"

"I think that the chapter's coverage of cognitive development in general, and the information-processing approach in particular, is quite successful. . . . The writing style, level of presentation, and interest level are all excellent."

—ROBERT SIEGLER *Carnegie Mellon University*

CHAPTER 9:
Complex Cognitive Processes

- Material from former chapter 8 in the first edition—concepts, thinking, and problem solving—now in a new stand-alone chapter
- New section on creativity now in this chapter (this topic was in chapter 4, Individual Variations, in the first edition)
- New section on decision making with extensive coverage of the biases and flaws that can interfere with good decision making
- New discussion of the role of emotions in problem solving
- Revised and expanded material on inductive and deductive reasoning, including new figure (9.4)
- Revised and improved coverage of algorithms
- New Diversity and Education interlude: "Transfer and Cultural Practices"
- New chapter-opening teaching story on Marilyn Whirry, a twelfth-grade English teacher, who emphasizes depth of thinking
- Revised and separated Teaching Strategies for Improving Children's Thinking and Improving Students' Problem Solving to make them more focused and less cumbersome
- New research on the effectiveness of using the *Jasper* Series in fifth-grade math classrooms (Hickey, Moore, & Pellegrino, 2001)

CHAPTER 10:
Social Constructivist Approaches

- New chapter focused exclusively on social constructivist approaches (in the first edition, this material was in the same chapter as cognition in the content areas)
- New section added, "A Collaborative School," based on an innovative social constructivist program
- New Self-Assessment: "Evaluating My Social Constructivist Experiences"
- New recent research on schooling as a cultural process that focuses on comparison of students in a traditional school and a collaborative school (Matusov, Bell, & Rogoff, 2001)
- New section on Johnson and Johnson's (2002) emphasis on creating a cooperative community
- New recent research on achievement goals and collaborating with a peer (Gabriele & Montecinos, 2001)
- Added coverage of Mary Gauvain's (2001) view on why social constructivist approaches are important for understanding how children learn and think
- Expanded discussion of Reading Recovery
- New discussion of PALS (Peer-Assisted Learning Strategies), including recent research on the effectiveness of PALS reading and PALS math (Fuchs, Fuchs, & Karns, 2001)
- Addition of new research on the effectiveness of scaffolding (Pressley & others, 2001) and cognitive apprenticeship (Englert, Berry, & Dunsmore, 2001)

CHAPTER 11:
Learning and Cognition in the Content Areas

- New stand-alone chapter on learning and cognition in the content areas
- New section on pedagogical content knowledge
- Completely new section on social sciences, including material on themes of social studies teaching and learning, as well as constructivist approaches in teaching social studies

- New chapter-opening teaching story on Betty Teufel, a reading teacher
- Some of the reading material was in chapter 2 in the first edition; all of the book's discussion of reading is now in this chapter
- Updated, recent coverage of research on reading (National Reading Panel, 2000) with more detailed information about what works in teaching children to read; also new introduction to section on reading with Steve Stahl's (2002) ideas on the three main goals of reading instruction
- Updated, revised ideas on teaching science (Cocking, Mestre, & Brown, 2000)
- New material on interactive demonstration strategy in helping students overcome misconceptions in science
- Discussion of important contemporary issue of whether elementary school students should use calculators to learn math, including recent national study and figure of data from the study
- New themes of planning and reviewing highlighted in the discussion of writing
- Expanded coverage of problem solving in writing
- New recent study by Pressley and others (2001) documenting that effective reading instruction not only involves a balanced reading approach but also effective classroom management and encouragement of student self-regulation
- New figure (11.5), A Plan Think-Sheet, to help students with planning their compositions
- New Diversity and Education interlude: "UN Peacekeeping: A Constructivist Approach"
- New Through the Eyes of Teachers inserts
- Extensively revised and updated coverage of math education based on recent recommendations by the National Council of Teachers of Mathematics
- Recent research by Constance Flanagan (Flanagan & Faison, 2001) showing how teachers can effectively instill a sense of democracy in students
- Considerably expanded teaching strategies for incorporating writing into the curriculum
- New research and figure (11.2) based on the research that links working memory capacity and reading

"This is an excellent chapter. . . . The chapter is rich in content and provides engaging multi-grade examples."

—CAROLINE GOULD *Eastern Michigan University*

"A separate chapter for the five main content areas is a great idea! This chapter is well organized with attention to important content areas— excellent to support students in their ability to connect educational psychology concepts with their 'how to' courses and understanding the cognition aspect."

LYNNE HAMMANN *University of Akron*

CHAPTER 12:
Planning, Instruction, and Technology

- Extensive reorganization of technology section, including deletion of computer-supported approaches to learning as recommended by reviewers
- New chapter-opening teaching story on using laptop computers in the classroom
- New section on ISTE technology standards (2000) for different grade levels, including many new examples of effective technology activities
- Updated search engines to include Google and others
- New discussion of an outstanding teacher who uses essential questions to direct what her students study
- Inclusion of recent research on parental involvement in homework (Hoover-Dempsey & others, 2001)
- New discussion of revision of Bloom's taxonomy to focus more on knowledge and cognitive processes (Anderson & Krathwohl, 2001)
- Coverage of recent large-scale study on students' perceptions of teachers and how these perceptions are linked to the students' motivation and achievement (McCombs, 2001; McCombs & Quiat, 1999)
- New section on ubiquitous computing and how students might benefit from it
- New Through the Eyes of Teachers inserts, one on Luis Recalde's efforts to foster learning and civic unity and one on Mary Lynn Peacher's strategies for guiding students to discover
- Revised, updated Self-Assessment: "Evaluating My Technology Skills and Attitudes"
- New figure (12.4) showing difference between Asian and U.S. parents' views on why children achieve in math
- New figure (12.7) based on recent research showing the relation of students' use of the Internet at home and science achievement
- Deleted the section on integrating the curriculum to make the chapter more cohesive and briefer

"This chapter is better handled than any other educational psychology text I've seen."

—JAN HAYES *Middle Tennessee State University*

"In this chapter, students receive an excellent introduction to planning, instruction, and technology."

—REVEREND JOSEPH DI MAURO *DeSales University*

CHAPTER 13:
Motivation, Teaching, and Learning

- New discussion of Lance Armstrong's battle with cancer and motivation to win the Tour de France as an example of motivation for students
- Changing of wording in a number of places to underscore the point that motivation comes from students and that teachers can provide effective strategies to help students become motivated
- Revised definition of motivation based on expert consultant Dale Schunk's recommendation
- New section on social motivation
- Deleted section on general motivational strategies toward the end of the chapter and focused more on hard-to-reach, unmotivated students
- New study by Strobel (2001) on the achievement motivation of minority students from low-income families
- New summary paragraph about rewards, competence, and interest based on expert consultant Dale Schunk's recommendation
- Important point made in the discussion of rewards and achievement that it is not the reward itself that causes the effect when the reward is about mastery but rather that offer or expectation of the reward, as recommended by Schunk
- New coverage of Nel Noddings' (1982, 2001) caring curriculum
- Expanded, updated material on teachers' supporting and caring behaviors, including new figure (13.5) on Wenzel's study of the qualities of caring teachers
- Revised definitions of intrinsic and extrinsic motivation as recommended by Schunk

"This chapter presents a nice balance between theory, research, and applications. Well done! . . . Very clear writing is used to explain some complex processes."
—DALE SCHUNK *University of North Carolina–Greensboro*

"I completed both a master's thesis and doctoral dissertation on achievement goal theory in motivation. . . . I thought this chapter did an excellent job of taking the various cognitive theories of motivation and translating them into specific strategies for creating a positive motivational environment. . . . My overall evaluation of the chapter: Excellent."
—BARBARA POWELL *Eastern Illinois University*

CHAPTER 14:
Managing the Classroom

- Revision of headings/topics in designing the physical environment of the classroom

- New section created on distinguishing rules and procedures as recommended by expert consultant Carolyn Evertson
- New section on teaching rules and procedures
- Reversed order of major sections on being a good communicator and dealing with problem behaviors based on the recommendations of reviewers. Being a good communicator now comes first because these strategies are intended to meet the needs of a wide range of students. However, sometimes these general strategies are not enough, so then teachers have to deal with problem behaviors if they arise
- Extensive reorganization of section on being a good communicator based on reviewer recommendations; now has three main parts (speaking skills, listening skills, and communicating nonverbally)
- New section on speaking with your class and students at the request of reviewers
- Expanded and updated coverage of bullying, including a recent large-scale national study and figure of the data in the study (Nansel & others, 2001) and a recent longitudinal study (Pellegrini & Long, 2001)
- New Through the Eyes of Teachers insert: "Great Teachers Have Few Discipline Problems"

"John Santrock does a good job with a complex topic. This chapter captures the key features that all teachers need to be aware of without overwhelming them with detail or secondary issues. . . . The research is quite current and the writing style flows and is easy to read."
—CAROLYN EVERTSON *Vanderbilt University*

"This is an excellent chapter and my suggestions are for polishing a gem. The section on being an effective communicator is a huge selling point for this chapter. The section on dealing with conflict capitalizes brilliantly on the notion of assertive perspectives and helps students see the connections to student learning and safety—a must for today's classrooms and schools."
—CONNIE MOSS *Duquesne University*

CHAPTER 15:
Standardized Tests and Teaching

- New section on fairness in standardized testing based on the recommendation of expert consultant, James McMillan
- Much expanded, revised, and updated coverage of high-stakes state-mandated tests
- New section on using standardized test scores to plan and improve instruction
- Replaced concept of minimum-competency concept with standard-based tests

- Discussion of validity moved before reliability because most assessment experts consider validity to be more important—based on McMillan's recommendation
- Revised definition and coverage of validity to emphasize the importance of inferences about the accuracy of test scores—also based on McMillan's recommendation
- New discussion of what teachers should not do in preparing students to take standardized tests
- Added comment about percentile rank in standardized testing being determined by comparison to group norm distribution
- Updated and revised discussion of issue focused on alternative assessments versus standardized tests to tie in with high-stakes state-mandated testing
- New Through the Eyes of Children insert: Tania Garcia's view of standardized tests
- New discussion of the failure of high-stakes testing to provide information for improving instruction and strengths and weaknesses of students, including new figure (15.4)
- New commentary about multiple roles of standardized scores
- Recent data showing national trends in reading, math, and science, including new figure on math trends

"This chapter provides great coverage of contemporary issues concerning the use of standardized (and nonstandardized) testing at the regional, national, and international levels."

—SANDRA NAGEL RANDALL *Saginaw Valley State University*

"This is another fine chapter covering current issues and traditional concepts. . . . I am delighted at the completeness of terms, concepts, and examples.

—ROBERT G. BROWN *Florida Atlantic University–Boca Raton*

the recommendation of expert consultant James McMillan because chapter 15 also focuses on assessing students' learning
- New figure 16.1 on decision making in assessment linked to pre-assessment, assessment during instruction, and post-instruction assessment
- Revision of definition of reliability and its discussion to emphasize scores rather than the measure, and new examples of reliability and validity, based on McMillan's recommendations
- New section on the strengths and weaknesses of matching items
- New coverage of offensiveness and unfair penalization in fairness of assessment
- New example of self-assessment in performance-based assessment
- Much expanded coverage of scoring rubrics, including new figures (16.8 and 16.9)
- New Teaching Strategies for using scoring rubrics
- New discussion of standards-based grading

"Overall, this is an excellent chapter and again my suggestions are for polishing a gem! The topics are extremely current and well written and work together to produce another stellar chapter."

—CONNIE MOSS *Duquesne University*

"This is one of the best chapters on student assessment I've seen in an educational psychology textbook."

—DAVID E. TANNER *California State University–Fresno*

CHAPTER 16:
Classroom Assessment

- New chapter title, Classroom Assessment, replacing one in first edition, Assessing Students' Learning, based on

Expert Research Consultants

Albert Bandura

Albert Bandura, currently David Starr Jordan Professor of Social Science at Stanford University, is one of the world's leading theorists and researchers in learning and cognition. Over the past five decades, Dr. Bandura has been one of America's most influential psychologists and is a former president of the American Psychological Association. In 1999, he received the Thorndike Award for Distinguished Contributions of Psychology to Education from the American Psychological Association. In 2001, he received the Lifetime Achievement Award from the Association for the Advancement of Behavior Therapy. His theory and research pioneered the interest in the concept of observational learning. Today, his social cognitive theory is widely recognized as one of the most effective conceptual views of how children learn and has spawned thousands of research studies. One of his main current interests focuses on how children regulate their own motivation, thinking, and affect through self-efficacy.
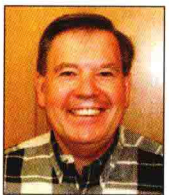
Gary Bitter

Gary Bitter, Professor of Educational Technology and Executive Director of Technology Based Learning & Research at Arizona State University, is a leading expert on educational technology. He has been the principal investigator for numerous educational technology grants, is a Past President of the International Society for Technology in Education, (ISTE) and served on the NCATE Technology Task Force releasing the report, "Technology and the New Professional Teacher: Preparing for the 21st Century Classroom." Dr. Bitter has also served as Co-Principal Investigator for the National Educational Technology Standards (NETS) Project. He is presently on the leadership team for the ISTE Preparing Tomorrow's Teachers to Use Technology Grant as well as Principal Investigator of a FIPSE Learning Anytime Anywhere Grant.
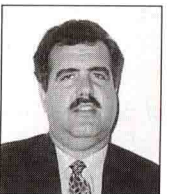
Carlos F. Diaz

Carlos F. Diaz is a Professor of Education at Florida Atlantic University, Boca Raton, Florida, where he received his Ed.D., Ed.S. and M.Ed. in curriculum and instruction. He was formerly an Associate Professor of Education in the Department of Educational Foundations and Technology, and currently he is Project Director for the Master of Education in Cultural Foundations with E.S.O.L. Endorsement program. He has also been a Visiting Professor at the Center for Multicultural Education, University of Washington, Seattle. Dr. Diaz has authored several books, chapters, and articles, such as *Multicultural Education in the 21st Century* and *Global Perspectives for Educators*. He has received numerous honors and awards, such as the Teaching Incentive Program Award (1996), the University Award for Excellence in Undergraduate Teaching (1996), Professor of the Year (1993), the 2000 Notable American Men award (1992), and recognition in *Who's Who Among Hispanic Americans, Rising Young Americans*, and *American Education*.

Eva L. Essa

Eva L. Essa is a Professor of Human Development and Family Studies at the University of Nevada, Reno, where she has taught for over 30 years. Recently she was instrumental in starting an interdisciplinary undergraduate program in early childhood education at the university with the College of Education. For 16 years, Dr. Essa also served as the Director of the Child and Family Research Center, the campus early childhood program. She has published several widely used early childhood education texts and numerous articles. Her research is focused on ways of improving the quality of early childhood education programs.

R. Carolyn M. Evertson

R. Carolyn M. Evertson is one of the world's leading experts on classroom management and is Professor of Education at Vanderbilt University, where she is Director of COMP: Creating Conditions for Learning, a nationally disseminated program for helping teachers with classroom management. She received her Ph.D. in educational psychology from the University of Texas, Austin. Dr. Evertson has published numerous articles and chapters on the social context of classrooms and supporting students' social and academic learning in school environments. She is the coauthor of two textbooks on classroom management for preservice teachers and is a Fellow of the American Psychological Association.
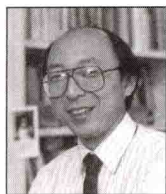
Kenji Hakuta

Kenji Hakuta, the Vida Jacks Professor of Education at Stanford University, is one of the world's leading authorities and researchers in the area of bilingual education. He is especially interested in how we can improve the education of language-minority students, how long it takes immigrant children to learn English, and whether there is a critical period for second-language acquisition.

Daniel P. Hallahan

Daniel P. Hallahan is one of the world's leading experts on children who are exceptional learners. He received his Ph.D. in education and psychology from the University of Michigan, and has been a member of the faculty of the Curry School of Education at the University of Virginia since 1971. He was appointed Chair of the Department of Curriculum, Instruction, and Special Education in 1997. Dr. Hallahan received the University of Virginia Outstanding Teaching Award in 1998 and currently holds the university's Cavaliers' Distinguished Teaching Professorship. He was the Inaugural Editor of *Exceptionality* from 1990 to 1992 and currently serves on the editorial boards of *Learning Disabilities Research and Practice, Learning Disability Quarterly, The Journal of Special Education,* and *Exceptionality.* Hallahan is a Past President of the Division for Learning Disabilities of the Council for Exceptional Children (CEC), and in 2000 he received the CEC Research Award. Hallahan's primary research interests are in the areas of learning disabilities, attention deficit hyperactivity disorder, and the history of special education. Many of his most recent publications have focused on educational placement issues in special education. He is coauthor of several books, including the widely used *Exceptional Learners: Introduction to Special Education,* ninth edition (2003, with James Kauffman), and *Introduction to Learning Disabilities,* second edition (1999, with James Kauffman and John Lloyd).

James H. McMillan

James H. McMillan is Professor of Educational Studies at Virginia Commonwealth University in Richmond, and Director of the Metropolitan Educational Research Consortium. He is author of *Classroom Assessment: Principles and Practice for Effective Instruction,* second edition, *Essential Assessment Concepts for Teachers and Administrators,* and has also written books in educational psychology and educational research. Some of his publications include articles in *Educational Measurement: Issues and Practice, Educational Horizons, Educational and Psychological Measurement,* the *Journal of Educational Psychology,* and the *American Educational Research Journal.* Dr. McMillan currently is investigating the relationship between classroom assessment and grading practices, and teacher decision making about assessment. For the past several years he has been active in Virginia's new state testing and accountability program. Dr. McMillan also directs the Metropolitan Educational Research Consortium, a university/public school partnership that conducts and disseminates action research.